

From: Rob D.
To: Distribution
Subject: Leader Eagle Relay/Alarm Out Operation
CC:

Hardware

The relay/alarm out connector provides three separate connections to an internal relay. The three connections provide a common, normally closed and normally open connections. The relay contacts are rated at 16A @ 250VAC and 16A @ 30VDC. Refer to figure 3 for the relay/alarm out connector locations and connection details. These connections are to a set of contacts that are isolated from the Eagle power system therefore external power must be provided to these connections to provide power to an external light, or audible alarm.

The relay/alarm out panel is an optional component on the Leader Eagle printer. If the relay/alarm out functionality is desired please order part number 825-00011-001 with your Eagle printer order.

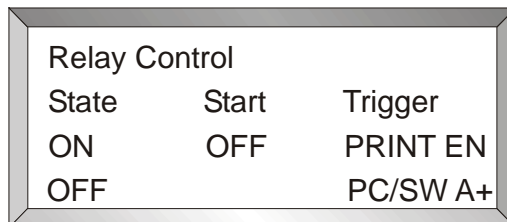
Relay/Alarm Out Settings Setup

The Eagle printer software provides selection of relay/alarm setup settings. These settings are saved with each individual message.txt file and therefore are changed with message recall on the Eagle HHT (Hand Held Terminal). These settings can be accessed via the Eagle HHT, or via the Leader ImageMaster software.

Eagle HHT Relay/Alarm Out Setup

The Relay screen only functions if you have the relay out option installed on your Eagle printer. You can use this screen to set up the initial state, the event that triggers the relay signal to be sent and the event that cancels the relay signal.

Relay or alarm out control starts with the initial state. The initial or start state can be on or off and is selectable via the edit toggle function after selecting the Start edit field. Next the On state needs to be set to an available Eagle event via the edit toggle function after selecting the On Trigger edit field. The On trigger can be enabled for the following Eagle printer events: Build Complete, Field Changed, Print Start, Print Enable, and Spit Timeout. Lastly we will set the Trigger Off event via the edit toggle function after selecting the Off Trigger edit field. The Off trigger can be enabled for the following Eagle printer events: Photocell or switch A or B, + or -, and Print stop. Refer to figure 1 below for Eagle HHT screen layout.



Relay Control		
State	Start	Trigger
ON	OFF	PRINT EN
OFF		PC/SW A+

Figure 1 Eagle HHT, or Hand Held Terminal Relay Control Screen.

Leader ImageMaster Relay/Alarm Output Setup

The Leader ImageMaster software allows the same selections as the Eagle HHT. These selections are available in the Tools or Properties dialog box by selecting the AutoData/Etc tab. The use of drop down selection boxes eases the selection of trigger on and off settings. Radio buttons enable the start or off start state. Refer to figure 2 for the location of these settings via screen clips from ImageMaster. These settings can be saved as defaults to be used with all message.txt files created with ImageMaster.

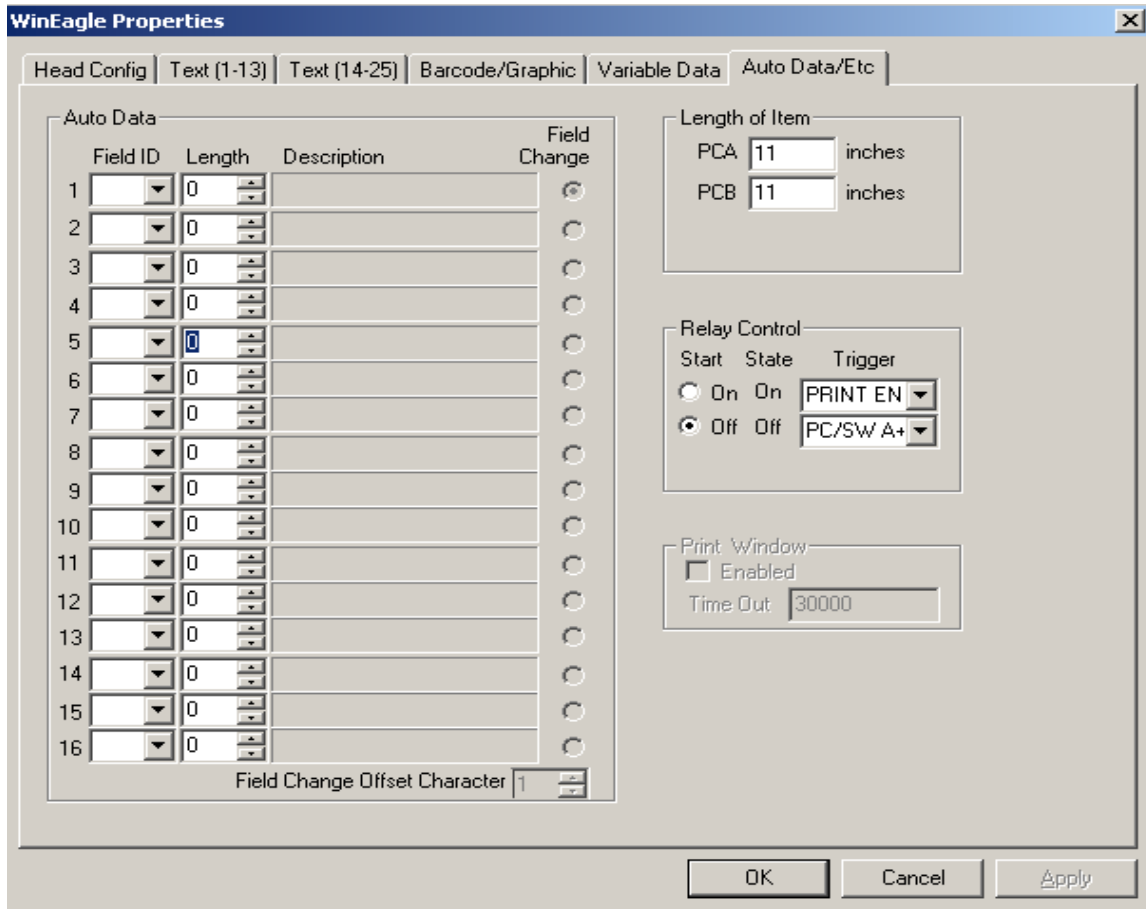


Figure 2 Leader ImageMaster Relay Control Screen clip from WinEagle Properties – AutoData/Etc tab.

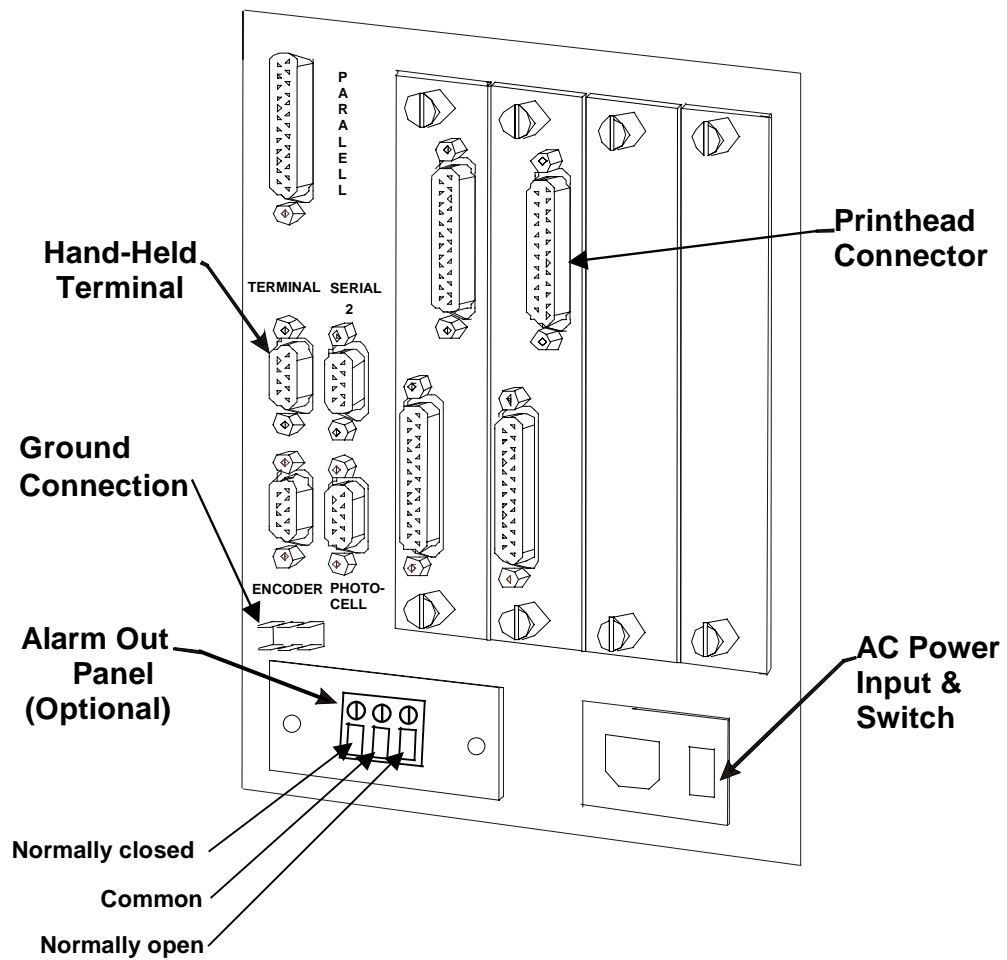


Figure 3 Eagle relay/alarm out connector location and connection detail.

Typical Applications for Relay/Alarm Out

Spit Time Out Strobe

Print Application

This application utilizes the relay/alarm out signal to drive a strobe light when the spit has timed out on the Eagle printer. This printing application is obviously using fast drying non-porous ink. If the Eagle printer system is left unattended for long periods of time the operator(s) might not notice that the spit has timed out and that the print head needs to be primed or swiped prior to print startup. To minimize waste the distributor provided a turnkey solution to their customer with the use of common hardware and the Eagle relay/alarm out option.

Hardware

A strobe light and external power source connected to the relay/alarm out connections and the following relay/alarm out settings provided the customer with the requested solution.

Relay/Alarm Out Settings

Start state: Off

On Trigger: Spit Time Out

Off Trigger: Photocell A +

Mailing Application Automatic Zip Code Routing Breaks

Print Application

This mailing application utilized the relay/alarm out signal to increase the speed of the process conveyor when a new zip code was detected in the auto data. This increase in speed provided a break in the product that was used by the operators to help route and bundle the product appropriately.

Hardware

The relay/alarm out signal was routed to the product conveyor speed control system to allow a speed up for the duration of the relay out signal.

Relay/Alarm Out Settings

Start state: Off

On Trigger: Field Change

Off Trigger: Photocell A +

Note: Additional Eagle auto data and field change character selection setup was necessary for this application. Refer to the Eagle Operators manual for details.

Host Print Triggering

Print Application

This application utilized the relay/alarm out signal to trigger the Eagle printer upon reception of auto data. The host system would send auto data to the Eagle printer to initiate a print cycle with the new data automatically.

Hardware

The relay/alarm out signal was routed to the Eagle photocell input connector via a special connector cable.

Relay/Alarm Out Settings

Start state: On

On Trigger: Build Complete

Off Trigger: Photocell A +

Note: Additional Eagle auto data setup was necessary for this application. Refer to the Eagle Operators manual for details.

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Best Regards,
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